

PATENT SPECIFICATION

DRAWINGS ATTACHED

Inventor: ESKO TAPIO OLSSON

1.160.625



1.160.625

Date of Application and filing Complete Specification: 4 April, 1967.

No. 15290/67.

Application made in Sweden (No. 5798) on 28 April, 1966.

Complete Specification Published: 6 Aug., 1969.

Index at acceptance: —A5 R83A

International Classification: —A 61 f 13/16

COMPLETE SPECIFICATION

Sanitary Towel

We, MÖLNLYCKE AB, a Swedish Body Corporate of Götesborgsvägen 95, Gothenburg, Sweden, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

Sanitary towels usually consist of an absorbent core, an envelope and a soft, usually wadding-like material disposed between the envelope and the core. Usually the envelope is a comparatively wide-meshed net the main functions of which are to hold the enclosed material together and to enable the towel to be attached to means for keeping the towel in place. The net is highly pervious to moisture or liquid which is absorbed by the absorbent material, but affords no protection if the absorbent member is thoroughly damp or soaked and cannot prevent leakage at the edges of the towel.

According to the invention there is provided a sanitary towel comprising an absorbent core member, an envelope and a wadding-like layer between the absorbent core member and the envelop, said envelop consisting of a non-woven soft material treated, or of a nature, such as to prevent absorption in an dispersion of liquid through the material of the envelope itself, said envelope being perforated on the side intended to face the body of the wearer.

Advantageously, the envelope consists of a fibrous material, for example, of rayon fibres, which has been rendered hydrophobic by suitable treatment. Alternatively the envelope may consist of a material which without especial treatment is in itself hydrophobic.

Specific embodiments of the invention will now be described by way of example with reference to the accompanying drawings in which;

Fig. 1 is a cross-sectional view of a first embodiment of the invention;

Fig. 2 is a cross-sectional view of a second embodiment;

Fig. 3 is a plan view of a towel having different shapes of perforations on the side of the towel intended to face the body of the wearer;

Fig. 4 is a view similar to Fig. 3 showing alternative patterns of perforations; and

Fig. 5 illustrates the towel of Fig. 4 when viewed against one longitudinal edge thereof.

In all embodiments illustrated the towel consists of an inner absorbent core member 1, an envelope 2 and a soft wadding-like layer 3 provided between the envelope and the absorbent core member. In addition, a thin liquid-dispersing layer 4 may be inserted in the absorbent core member 1.

Preferably, the absorbent core member 1 consists of dry defibrated cellulose, and the liquid-dispersing layer 4 in the absorbent core member consists of a sheet of cellulose wadding. If desired, such a sheet of cellulose wadding may be provided on both faces of the core member 1 as indicated at 5 and 6 in Figs. 1 and 2.

The soft layer 3 may consist of a wadding-like material of rayon fibres which upon contact with liquid permit such liquid to pass directly therethrough to the absorbent core member without rendering possible, in any appreciable degree, absorption or lateral transportation of liquid in this soft fibrous layer 3. Alternatively, the soft fibrous layer 3 may consist of synthetic fibres for example polypropylene fibres, having the same properties as the rayon fibres but being treated in a manner such that no absorption or lateral transportation of liquid can occur in the soft fibrous layer 3.

After having afforded passage to the liquid the soft fibrous layer 3 isolates this liquid in the core member 1. Consequently, the soft fibrous layer 3 and the surface thereof will remain dry after the passage of the liquid.

5 The envelope 2 which forms a wrapper about the core member 1 and the soft fibrous layer 3 consists of a non-woven material treated, or of a nature, such that liquid cannot be absorbed in or dispersed through the material of the envelope itself. Usually the envelope is intended to imperforately cover the core member and the soft layer except for the side of the towel which is intended to face the body. At this side of the towel the envelope is perforated and, consequently, pervious to liquid. The area of the perforations is such that the liquid immediately can pass therethrough and through the soft fibrous layer to the absorbent core member. After the liquid has passed through the envelope the envelope will also be dry. Due to the fact that the envelope in itself cannot absorb or disperse liquid it provides an effective protection against leakage at the edges of the towel and cannot become moist.

10 In order that the material of the envelope is impervious to moisture or liquid, the envelope may consist of a material, for example a layer of paper, which has been rendered hydrophobic, for instance by passage through a paraffin bath.

15 In the embodiment illustrated in Fig. 1 the soft layer 3 extends only along the inner face of the perforated portion of the envelope at the side of the towel which is intended to face the body of the wearer; in Fig. 2 the soft layer 3 also extends partially along the longitudinal edges of the towel.

20 Examples of different patterns of the perforations 7 of the envelope are illustrated in

Figs. 3 and 4. As shown in Fig. 5, the holes, which may be comparatively large, may partly extend into the longitudinal edges of the towel.

WHAT WE CLAIM IS:—

1. A sanitary towel comprising an absorbent core member, an envelope and a wadding-like layer between the absorbent core member and the envelope, said envelope consisting of a non-woven soft material treated, or of a nature, such as to prevent absorption in and dispersion of liquid through the material of the envelope itself, said envelope being perforated on the side intended to face the body of the wearer.

2. A sanitary towel as claimed in claim 1, wherein the envelope consists of fibrous material which has been rendered hydrophobic by suitable treatment.

3. A sanitary towel as claimed in claim 1, wherein the envelope consists of material which in itself is hydrophobic.

4. A sanitary towel as claimed in any preceding claim, wherein the envelope is liquid-tight on the side intended to face away from the body of the wearer and at the edges thereof.

5. A sanitary towel substantially as described herein, with reference to Fig. 1 in combination with Fig. 3 or with Figs. 4 and 5 of the accompanying drawing.

6. A sanitary towel substantially as described herein, with reference to Figs. 2 in combination with Fig. 3 or with Figs. 4 and 5 of the accompanying drawing.

MOLNLYCKE AB,

Per: Boulton, Wade & Tennant,
112, Hatton Garden, London, E.C.1.
Chartered Patent Agents.

1160625

COMPLETE SPECIFICATION

2 SHEETS

*This drawing is a reproduction of
the Original on a reduced scale*

Sheet 1

FIG. 1

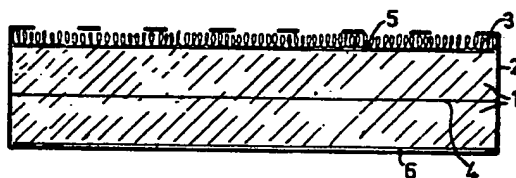
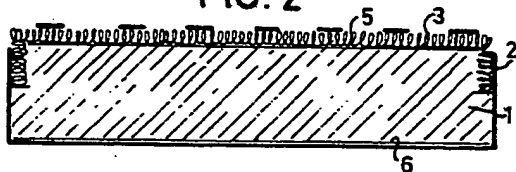


FIG. 2



1160625

COMPLETE SPECIFICATION

2 SHEETS

*This drawing is a reproduction of
the Original on a reduced scale*

Sheet 2

